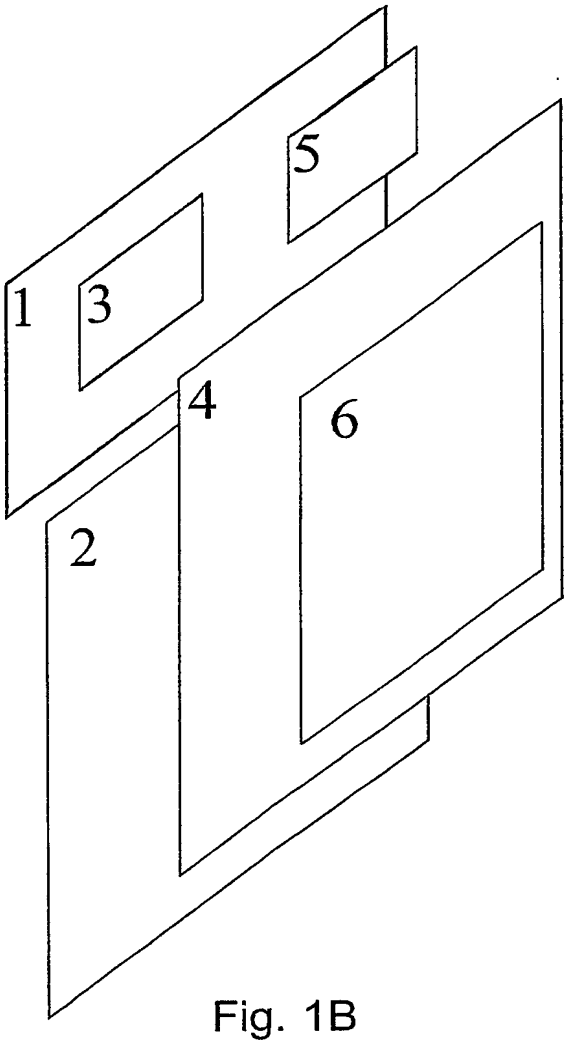

Fig. 1B

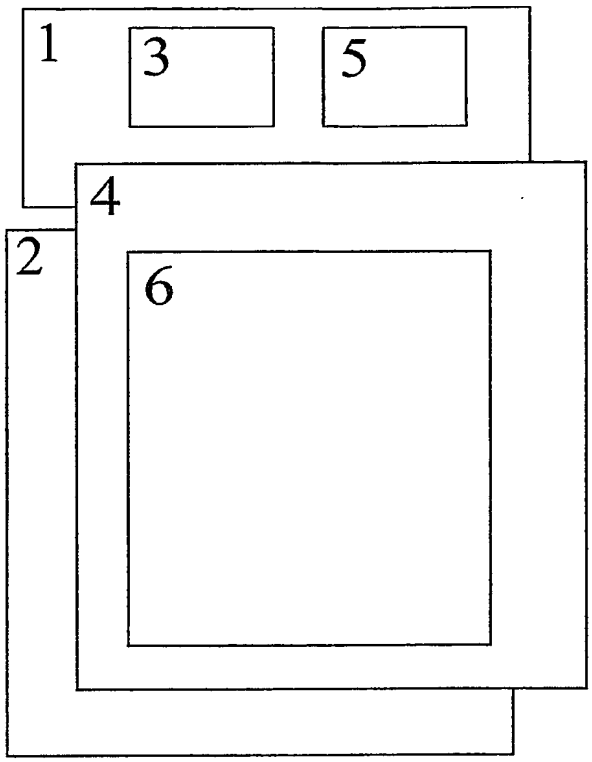

Fig. 1A

	1	2	3	4	5	6
1		0	1	1	1	0
2	0		0	1	0	1
3	1	0		0	0	0
4	1	1	0		0	1
5	1	0	0	0		0
6	0	1	0	1	0	

Fig. 2

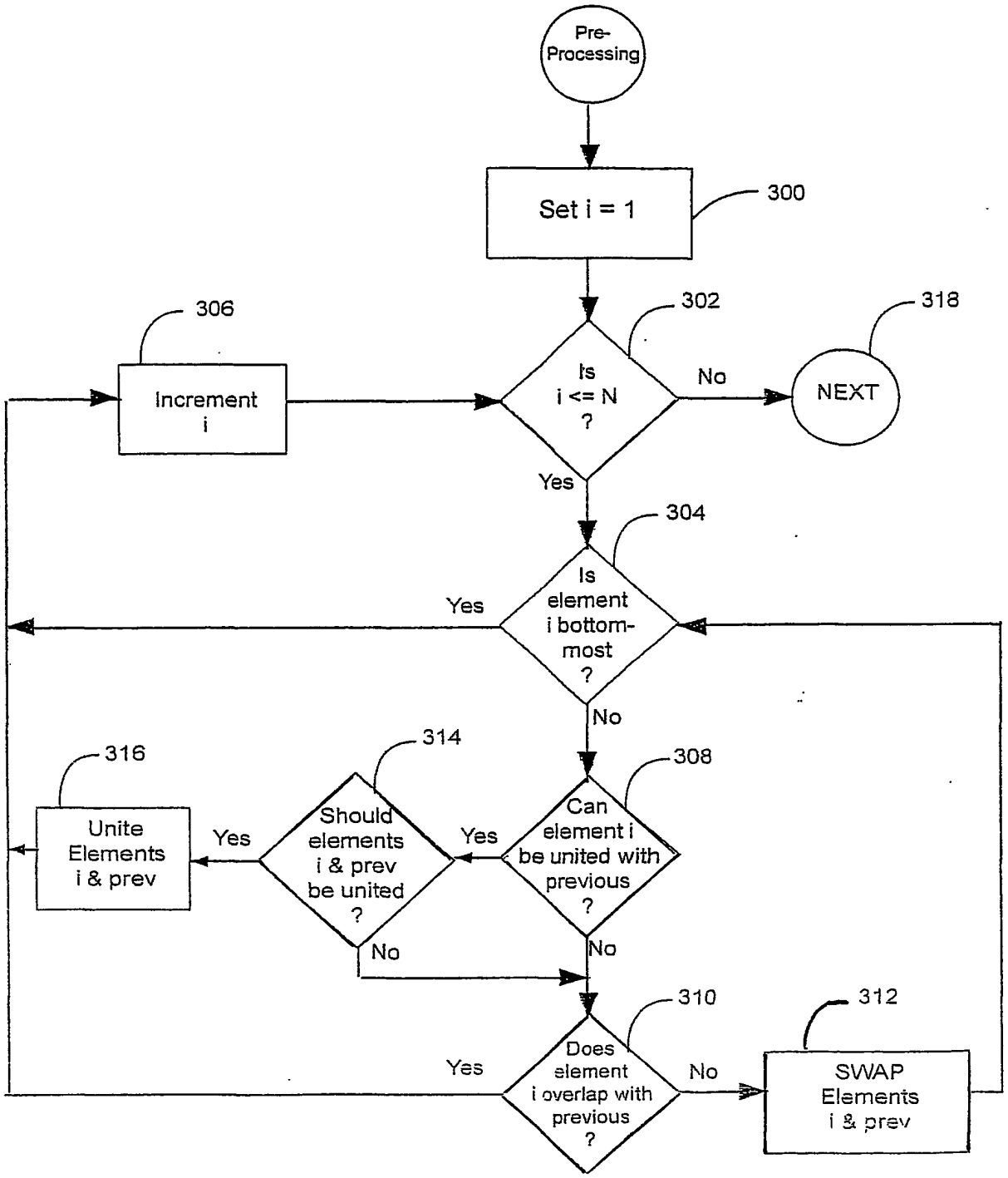
Pre-Processing
Set i = 1
300
Is i <= N ?
302
No
NEXT
318
Yes
Increment i
306
Is element i bottom-most ?
304
Yes
No
Can element i be united with previous ?
308
Yes
Should elements i & prev be united ?
314
Yes
Unite Elements i & prev
316
No
No
Does element i overlap with previous ?
310
Yes
No
SWAP Elements i & prev
312

Fig. 3

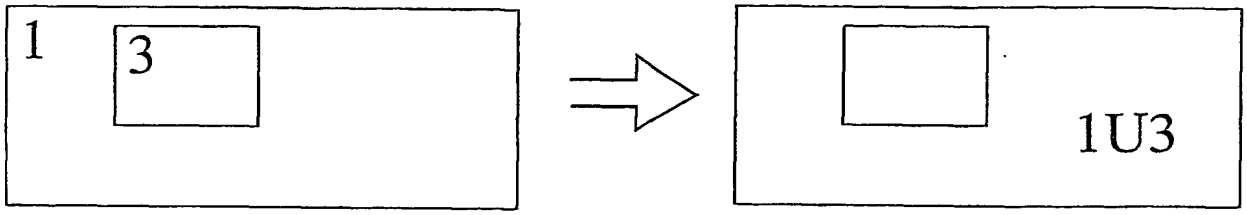

Fig. 4

	2	1U3	4	5	6
2		0	1	0	1
1U3	0		1	1	0
4	1	1		0	1
5	0	1	0		0
6	1	0	1	0	

Fig. 5

	2	1U3U5	4	6
2		0	1	1
1U3U5	0		1	0
4	1	1		1
6	1	0	1	

Fig. 6

	2	1U3U5	4U6
2		0	1
1U3U5	0		1
4U6	1	1	

Fig. 7

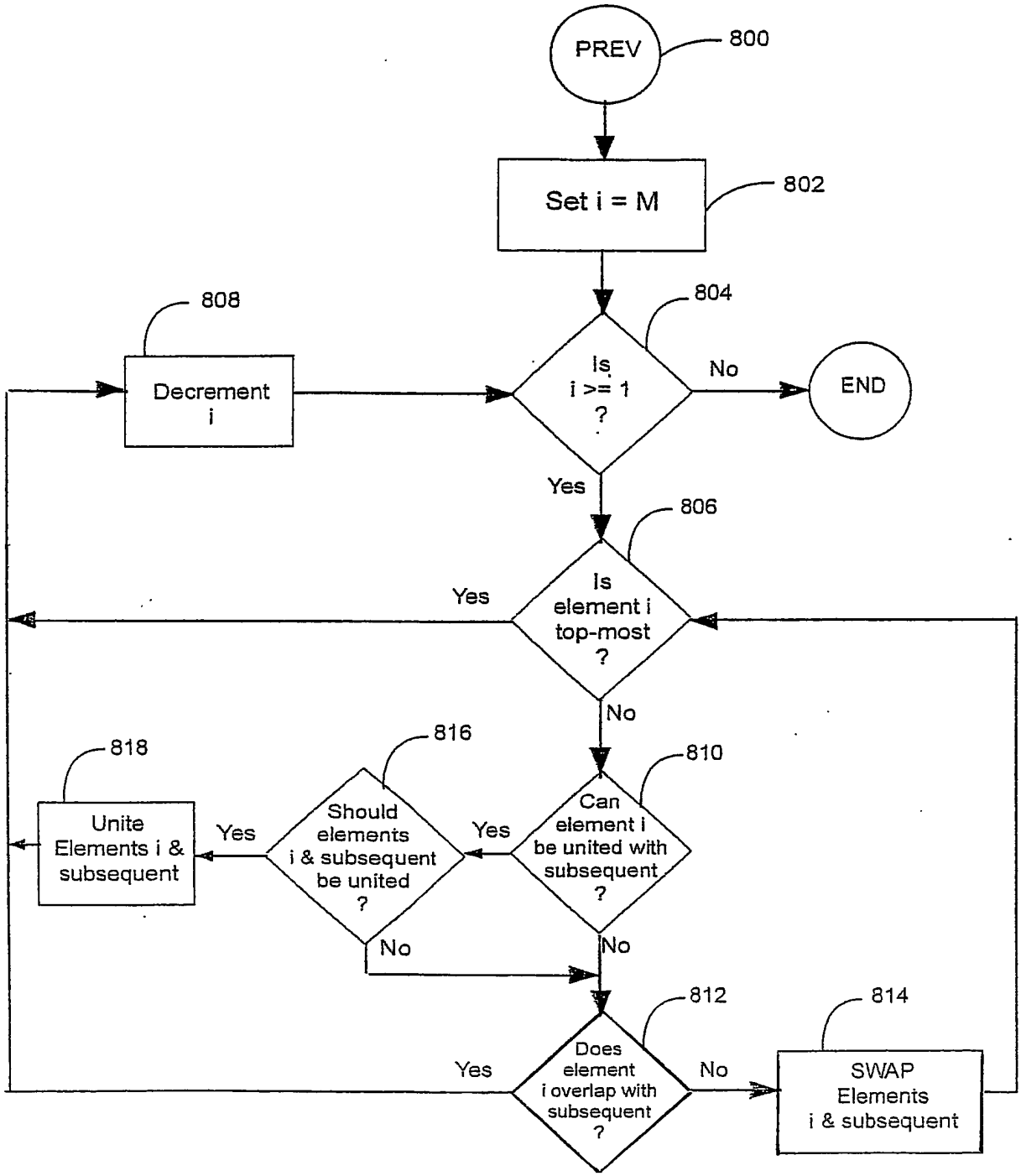
PREV
800
Set i = M
802
804
Is i >= 1 ?
No
END
Yes
808
Decrement i
806
Is element i top-most ?
Yes
No
816
818
810
Unite Elements i & subsequent
Yes
Should elements i & subsequent be united ?
Yes
Can element i be united with subsequent ?
No
No
812
814
Does element i overlap with subsequent ?
Yes
No
SWAP Elements i & subsequent

Fig. 8

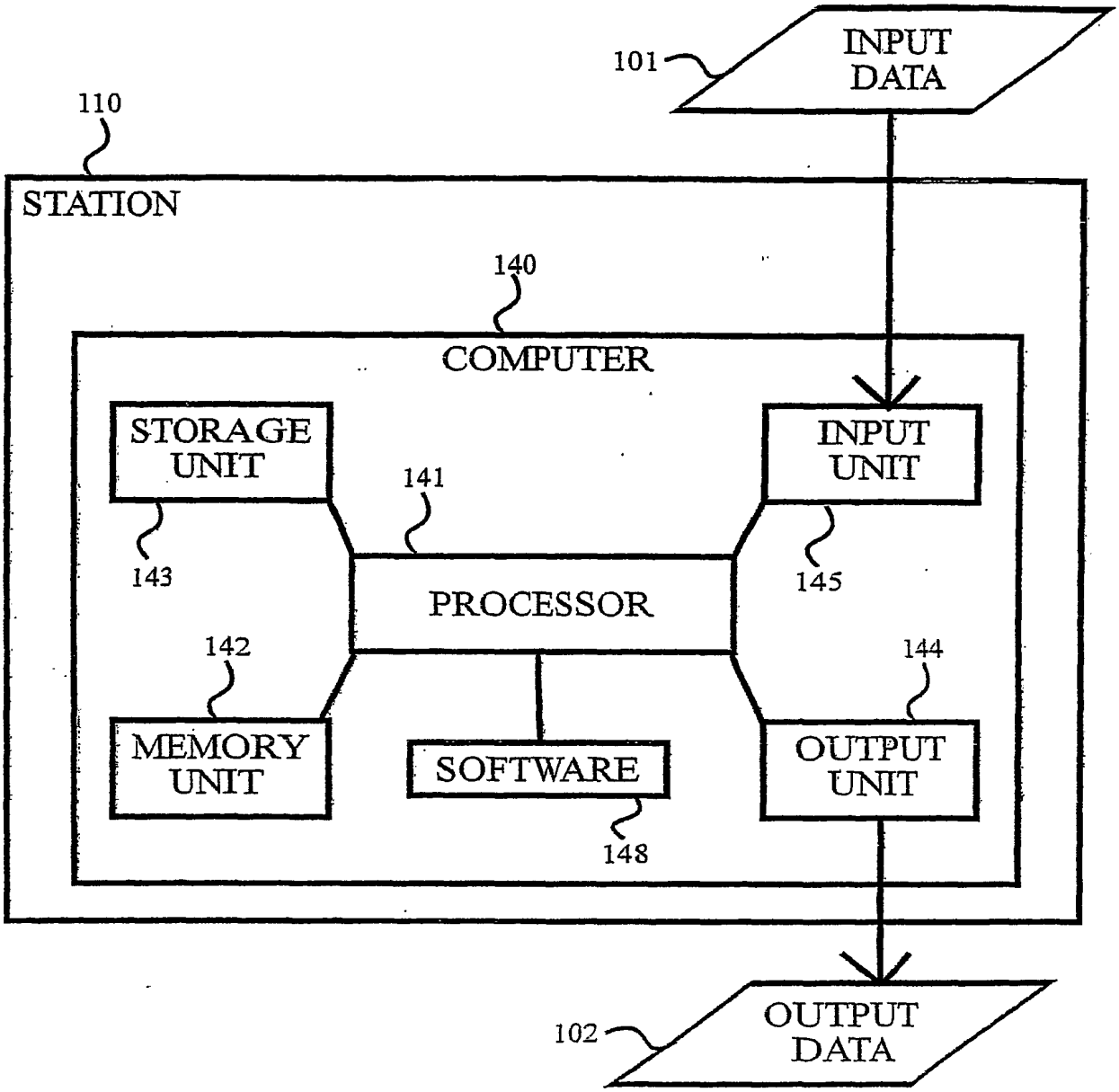
INPUT DATA
101
110
STATION
140
COMPUTER
STORAGE UNIT
143
141
INPUT UNIT
145
PROCESSOR
142
144
MEMORY UNIT
SOFTWARE
148
OUTPUT UNIT
102
OUTPUT DATA

FIG. 9